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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/702,955      | 10/31/2000  | James E. Moon        | 14917.1.4           | 3434             |

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| EXAMINER |
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THERKORN, ERNEST G

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| ART UNIT | PAPER NUMBER |
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1723

DATE MAILED: 12/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/702,955

Applicant(s)

MOON

Examiner

THERKORN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Nov 18, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,454,938. Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ in an obvious difference of scope.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 102(E) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tai (U.S. Patent No. 5,994,696). The claim is considered to read on Tai (U.S. Patent No. 5,994,696). However, if a difference exists between the claim and Tai (U.S. Patent No. 5,994,696), it would reside in optimizing the elements of Tai (U.S. Patent No. 5,994,696). It would have been obvious to optimize the elements of Tai (U.S. Patent No. 5,994,696) to enhance separation.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tai (U.S. Patent No. 5,994,696) in view of Snyder, Introduction to Modern Liquid Chromatography, pages 270-

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272 and 277-278 and either Sekine (U.S. Patent No. 5,294,426) and Cremer (U.S. Patent No. 3,669,881). At best, the claim differs from Tai (U.S. Patent No. 5,994,696) in the clarity of reciting the stationary phase and an insulating layer. Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization to be hydrophobic or hydrophilic is considered to be a stationary phase. Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization to be hydrophobic or hydrophilic is considered to be electrically insulating. In any event, Snyder, Introduction to Modern Liquid Chromatography, pages 270-272 and 277-278 discloses that the most widely used chromatography packing is a surface reacted, chemically bonded organic stationary phase; reverse-phase hydrocarbon (hydrophobic) coatings are the closest to a universal stationary phase; and a hydrophilic layer is used for gel filtration chromatography. Sekine (U.S. Patent No. 5,294,426) (Abstract, lines 1-10 and column 5, lines 1-9) discloses that alkyl modified silica is an insulating medium and that petroleum products are electrically insulating. Cremer (U.S. Patent No. 3,669,881) (col. 9, lines 19-22) discloses that it is advantageous to have a stationary phase having an insulating surface. It would have been obvious that Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization to be hydrophobic or hydrophilic is a stationary phase because Snyder, Introduction to Modern Liquid Chromatography, pages 270-272 and 277-278 discloses that the most widely used chromatography packing is a surface reacted, chemically bonded organic stationary phase; reverse-phase hydrocarbon (hydrophobic) coatings are the closest to a universal stationary phase; and a hydrophilic layer is used for gel filtration chromatography. It would have been obvious that Tai (U.S. Patent No. 5,994,696)'s stationary phase has an

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insulating property because Sekine (U.S. Patent No. 5,294,426) (Abstract, lines 1-10 and column 5, lines 1-9) discloses that alkyl modified silica is an insulating medium and that petroleum products are electrically insulating. Alternatively, it would have been obvious to use a stationary phase having an insulated surface in Tai (U.S. Patent No. 5,994,696) because Cremer (U.S. Patent No. 3,669,881) (col. 9, lines 19-22) discloses that it is advantageous to have a stationary phase having an insulating surface.

The remarks urge that the amendments to claim 17 overcome the double patenting rejection. However, the added feature, an isolating layer, is disclosed in claim 2 of U.S. Patent No. 6,454,938.

The remarks urge that Tai (U.S. Patent No. 5,994,696) does not anticipate claim 17. However, Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization to be a stationary phase. Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization is considered to electrically insulating.

The remarks urge that claim 17 is not rendered obvious by Tai (U.S. Patent No. 5,994,696) and the secondary references. However, Snyder, Introduction to Modern Liquid Chromatography, pages 270-272 and 277-278 discloses that the most widely used chromatography packing is a surface reacted, chemically bonded organic stationary phase; reverse-phase hydrocarbon (hydrophobic) coatings are the closest to a universal stationary phase; and a hydrophilic layer is used for gel filtration chromatography. Sekine (U.S. Patent No. 5,294,426) (Abstract, lines 1-10 and column 5, lines 1-9) discloses that alkyl modified silica is an

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insulating medium and that petroleum products are electrically insulating. Cremer (U.S. Patent No. 3,669,881) (col. 9, lines 19-22) discloses that it is advantageous to have a stationary phase having an insulating surface. It would have been obvious that Tai (U.S. Patent No. 5,994,696)'s column 5, lines 25-27 derivitization to be hydrophobic or hydrophilic is a stationary phase because Snyder, Introduction to Modern Liquid Chromatography, pages 270-272 and 277-278 discloses that the most widely used chromatography packing is a surface reacted, chemically bonded organic stationary phase; reverse-phase hydrocarbon (hydrophobic) coatings are the closest to a universal stationary phase; and a hydrophilic layer is used for gel filtration chromatography. It would have been obvious that Tai (U.S. Patent No. 5,994,696)'s stationary phase has an insulating property because Sekine (U.S. Patent No. 5,294,426) (Abstract, lines 1-10 and column 5, lines 1-9) discloses that alkyl modified silica is an insulating medium and that petroleum products are electrically insulating. Alternatively, it would have been obvious to use a stationary phase having an insulated surface in Tai (U.S. Patent No. 5,994,696) because Cremer (U.S. Patent No. 3,669,881) (col. 9, lines 19-22) discloses that it is advantageous to have a stationary phase having an insulating surface.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.

**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT/12  
December 4, 2002